



RECEIVED
AUG 13 2003
TECH CENTER 1600/2900

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: A.S. Hoffman et al. Attorney Docket No.: UWOTL119001

Application No.: 09/755,701

Group Art Unit: 1639

Filed: January 5, 2001

Examiner: M.C.T. Tran

Title: ENHANCED TRANSPORT USING MEMBRANE DISRUPTIVE AGENTS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Seattle, Washington 98101

August 8, 2003

#19
Eugene
1-3004

TO THE COMMISSIONER FOR PATENTS:

Applicants are aware of the information listed in the attached form that may be material to the prosecution of the above-identified patent application.

1. X Copies of the listed publications and other information are enclosed for the Examiner's use.
2. X Pursuant to 37 C.F.R. § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in 37 C.F.R. § 1.97(b) but before the mailing date of a final action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution, and is accompanied by the submission fee set forth in 37 C.F.R. § 1.17(p). Check No. 149736 in the amount of \$180.00 is enclosed.
3. X The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16, 1.17 and 1.18 which may be required during the entire pendency of the application, or credit any overpayment, to Deposit Account No. 03-1740. This authorization also hereby includes a request for any extensions of time of the

///

///

///

///

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

appropriate length required upon the filing of any reply during the entire prosecution of this application.

Respectfully submitted,

CHRISTENSEN O'CONNOR
JOHNSON KINDNESS^{PLLC}

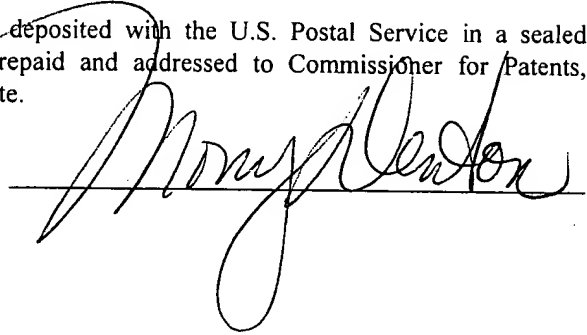


George E. Renzoni, Ph.D.
Registration No. 37,919
Direct Dial No. 206.695.1755

I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid and addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the below date.

Date:

August 8, 2003



GER:cj/md

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

appropriate length required upon the filing of any reply during the entire prosecution of this application.

Respectfully submitted,

CHRISTENSEN O'CONNOR
JOHNSON KINDNESS^{PLLC}

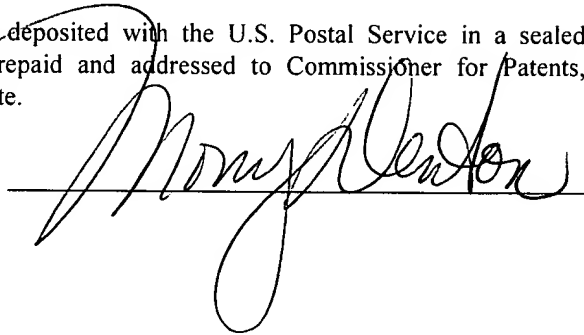


George E. Renzoni, Ph.D.
Registration No. 37,919
Direct Dial No. 206.695.1755

I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid and addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the below date.

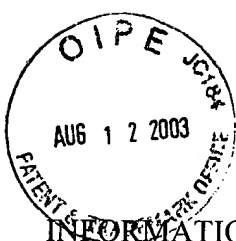
Date:

August 8, 2003



GER:cj/md

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100



INFORMATION CITED BY APPLICANTS THAT MAY BE MATERIAL TO THE
PROSECUTION OF THE SUBJECT APPLICATION

Applicants: A.S. Hoffman et al. Attorney Docket No. UWOTL119001
Application No.: 09/755,701 Group Art Unit: 1639
Filed: January 5, 2001 Examiner: M.C.T. Tran
Title: ENHANCED TRANSPORT USING MEMBRANE DISRUPTIVE AGENTS

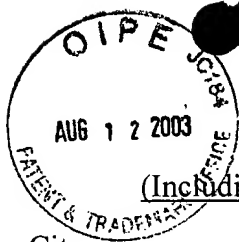
U.S. PATENT DOCUMENTS

*Examiner Initials	Cite No.	Document No.	Kind Code	Date (mm/dd/yyyy)	Name
	U6	4,657,543		04/14/1987	Langer et al.
	U7	5,362,308		11/08/1994	Chien et al.
	U8	5,501,584		03/26/1996	Yamamoto et al.
	U9	5,521,291		05/28/1996	Curiel et al.
	U10	5,547,932		09/20/1996	Curiel et al.
	U11	5,599,908		02/04/1997	Raso
	U12	5,603,931		02/18/1997	Raso
	U13	5,609,590		03/11/1997	Herbig et al.
	U14	5,656,609		09/12/1997	Wu et al.
	U15	5,753,263		05/19/1998	Lishko et al.
	U16	5,807,306		09/15/1998	Shapland et al.

FOREIGN PATENT DOCUMENTS

*Examiner Initial	Cite No.	Document No.	Kind Code	Publication Date (mm/dd/yyyy)	Country	English Abstract Provided	Translation Provided
	F1	WO 96/40958	A1	12/19/1996	WIPO		
	F2	WO97/04832	A1	02/13/1997	WIPO		
	F3	WO 97/09068	A2	03/13/1997	WIPO		
	F4	WO 98/33520	A1	08/06/1998	WIPO		

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100



OTHER INFORMATION

(Including Author, Title, Date, Pertinent Pages, Etc.)

*Examiner Cite
Initial No.

-
- _____ O8 Abelev, G.I., "Alpha-Fetoprotein in Ontogenesis and its Association with Malignant Tumors," *Adv. Cancer Res.* 14:295-350, 1971.
- _____ O9 Anderson, D.C., et al., "Enhanced in Vitro Tumor Cell Retention and Internalization of Antibody Derivatized with Synthetic Peptides," *Bioconjugate Chem.* 4(1):10-18, 1993.
- _____ O10 Buschle, M., et al., "Receptor-Mediated Gene Transfer into Human T Lymphocytes via Binding of DNA/CD3 Antibody Particles to the CD3 T Cell Receptor Complex," *Human Gene Therapy* 6:753-761, 1995.
- _____ O11 Choi, Y.H., et al., "Lactose-Poly(Ethylene Glycol)-Grafted Poly-L-Lysine as Hepatoma Cell-Targeted Gene Carrier," *Bioconjugate Chem.* 9(6):708-718, 1998.
- _____ O12 Cordes, E.H., and H.G. Bull, "Mechanism and Catalysis for Hydrolysis of Acetals, Ketals, and Ortho Esters," *Chemical Reviews* 74(5):581-603, 1974.
- _____ O13 Donbrow, M., *Microcapsules and Nanoparticles in Medicine and Pharmacy*, CRC Press, Boca Raton, 1992.
- _____ O14 Feijen J., et al., "Thermosensitive Polymers and Hydrogels Based on N-Isopropylacrylamide," *11th European Conference on Biomaterials*, Pisa, Italy, September 10-14, 1994, pp. 256-260.
- _____ O15 Fife, T.H., and L.K. Jao, "Substituent Effects in Acetal Hydrolysis," *Journal of Organic Chemistry* 30(5):1492-1495, May 1965.
- _____ O16 Geisow, M.J., "Fluorescein Conjugates as Indicators of Subcellular pH," *Experimental Cell Research* 150:29-35 (1984).
- _____ O17 Gold, P., and S.O. Freedman, "Specific Carcinoembryonic Antigens of the Human Digestive System," *J. Exp. Med.* 122(3):467-481, 1965.
- _____ O18 Guy, R.H., "Current Status and Future Prospects of Transdermal Drug Delivery," *Pharm. Res.* 13(12):1765-1769, 1996.
- _____ O19 Haensler, J. and F.C. Szoke, Jr., "Polyamidoamine Cascade Polymers Mediate Efficient Transfection of Cells in Culture," *Bioconjugate Chem.* 4(5):372-379, 1993.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

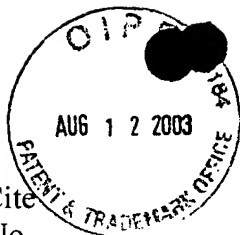


RECEIVED
AUG 18 2003
TECH CENTER 1600/2900

*Examiner Cite
Initial No.

- _____ O20 Hansch, C., and W.R. Glave, "Structure-Activity Relationships in Membrane-Perturbing Agents," *Molecular Pharmacology* 7:337-354, 1971.
- _____ O21 Hughes, J.A., et al., "Evaluation of Adjuvants that Enhance the Effectiveness of Antisense Oligodeoxynucleotides," *Pharm. Res.* 13(3):404-410, 1996.
- _____ O22 Kircheis, R., et al., "Coupling of Cell-Binding Ligands to Polyethylenimine for Targeted Gene Delivery," *Gene Therapy* 4:409-418, 1987.
- _____ O23 Kost, J., and R. Langer; "Responsive Polymer Systems for Controlled Delivery of Therapeutics," *TIBTECH* 10:128-130, 1992.
- _____ O24 Kratz, F., et al., "Drug-Polymer Conjugates Containing Acid-Cleavable Bonds," *Critical Reviews in Therapeutic Drug Carrier Systems*, " 16(3):245-288, 1999.
- _____ O25 Pawlak, M., et al., "Template-Assembled Melittin: Structural and Functional Characterization of a Designed, Synthetic Channel-Forming Protein," *Protein Science* 3:1788-1805, 1994.
- _____ O26 Perales, J.C., et al., "An Evaluation of Receptor-Medicated Gene Transfer Using Synthetic DNA-Ligand Complexes," *Eur. J. Biochem.* 226:255-266, 1994.
- _____ O27 Plank, C., et al., "The Influence of Endosome-Disruptive Peptides on Gene Transfer Using Synthetic Virus-Like Gene Transfer Systems," Plank, C., et al., *J. Biol. Chem.* 269(17):12918-12924, 1994.
- _____ O28 Prausnitz, M.R., "Reversible Skin Permeabilization for Transdermal Delivery of Macromolecules," *Critical Reviews in Therapeutic Drug Carrier Systems* 14(4):455-483, 1997.
- _____ O29 Prausnitz, M.R., et al., "Electroporation of Mammalian Skin: A Mechanism to Enhance Transdermal Drug Delivery," *Proc. Natl. Acad. Sci. USA* 90:10504-10508, November 1993.
- _____ O30 Prausnitz, M.R., et al., "Transdermal Delivery of Heparin By Skin Electroporation," *Biotechnology* 13:1205-1209, 1995.
- _____ O31 Press, O.W., et al., "Endocytosis and Degradation of Murine Anti-Human CD3 Monoclonal Antibodies by Normal and Malignant T-Lymphocytes," *Cancer Research* 48:2249-2257, April 15, 1988.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100



*Examiner
Initial

Cite
No.

-
- _____ O32 Ross, G., et al., "Gene Therapy in the United States: A Five-year Status Report," *Human Gene Therapy* 7:1781-1790, September 10, 1996.
- _____ O33 Schroeder, U.K.O., and D.A. Tirrell, "Structural Reorganization of Phosphatidylcholine Vesicle Membranes by Poly(2-ethylacrylic acid). Influence of the Molecular Weight of the Polymer," *Macromolecules* 22:765-769, 1989.
- _____ O34 Thomas, J.L., et al., "Membrane Solubilization by a Hydrophobic Polyelectrolyte: Surface Activity and Membrane Binding," *Biophysical Journal* 67:1101-1106, September 1994.
- _____ O35 Thomas, J.L., et al., "Polyelectrolyte--Sensitized Phospholipid Vesicles," *Acc. Chem. Res.* 25(8):336-342, 1992.
- _____ O36 Tolstikov, V.V., et al., "Influence of Endosome-Destabilizing Peptides on Efficacy of Anti-HIV Immunotoxins," *Bioconjugate Chem.* 8:38-43, 1997.
- _____ O37 Vinogradov, S.V., et al., "Self-Assembly of Polyamine-Poly(ethylene glycol) Copolymers with Phosphorothioate Oligonucleotides," *Bioconjugate Chem.* 9(6):805-812, 1998.
- _____ O38 Wang, L., et al., "Delivery of Antisense Oligonucleotides Using HPMa Polymer: Synthesis of A Thiol Polymer and Its Conjugation to Water-Soluble Molecules," *Bioconjugate Chem.* 9(6):749-858, 1998.
- _____ O39 Weaver, J.C., "Electroporation: A General Phenomenon for Manipulating Cells and Tissues," *J. Cell. Biochem.* 51:426-435, 1993.
- _____ O40 Wilder, R.B., et al., "Radioimmunotherapy: Recent Results and Future Directions," *Journal of Clinical Oncology* 14(4):1383-1400, April 1996.

Examiner

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

GER:cj/md

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100